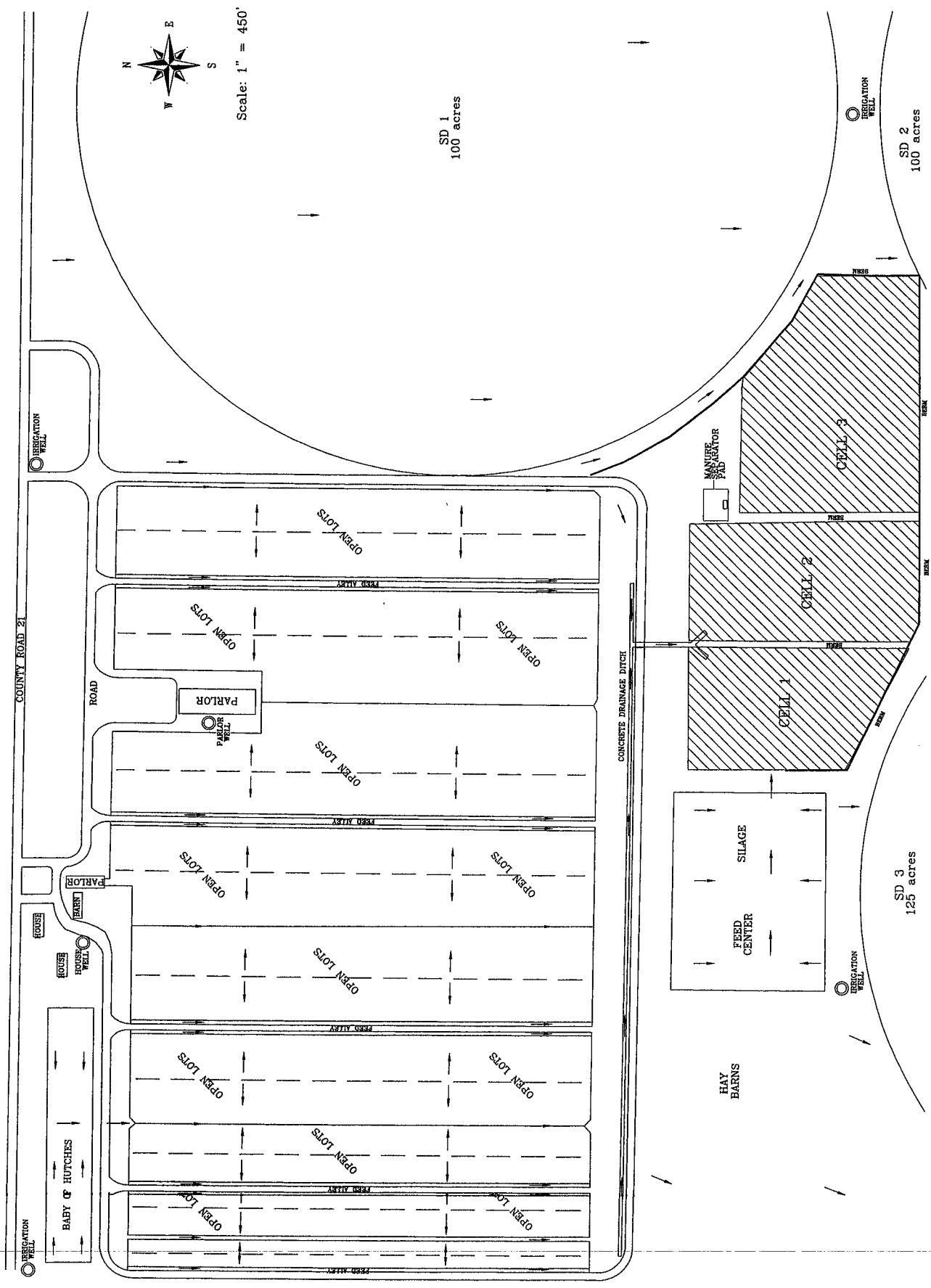


Site Plan  
Figure 5.3

Southern Draw Dairy  
Clovis, NM  
Curry County





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AUG 04 2000

GROUND WATER BUREAU

July 31, 2000

NMED

Mr. Danny Valenzuela

Water Resource Specialist, Groundwater Section

P.O. Box 26110

Santa Fe, NM 87502

Re: NMED DP-1022 Quarterly Reporting  
Southern Draw Dairy, Clovis, NM

Dear Mr. Valenzuela,

This is a quarterly report for the second quarter of 2000. The weather at the time of inspection was cloudy and cool with rain showers. As per conditions of DP-1022 please find attached the following.

- ▶ Sample results of the pond effluent and the three water wells. (Environ Labs, Amarillo, Texas; Lab ID# 14801, 14802, 14803, & 14804). Please note that this is a different laboratory than we normally use (City of Roswell). The City of Roswell has apparently cut funding and will not be able to perform our analysis in the future. Therefore, I plan to continue using Environ Labs of Amarillo. Analysis results for this quarter appear to be comparable to past results.

- ▶ Sample results from three water wells and one wastewater sample from the pond.

Location	NO <sub>3</sub> -N (mg/l)	TKN (mg/l)	TDS (mg/l)
House Well	0.24	< 1.0	273
Parlor Well	0.14	< 1.0	231
South Well	0.18	< 1.0	271
Pond	0.29	38	1723

- ▶ A representative wastewater sample was collected from the three pond cells this quarter. The TKN analysis of the wastewater is lower than normal. This could be a result of recent rain showers diluting the TKN concentration in the wastewater.
- ▶ All of the wastewater application fields were harvested for wheat silage in the spring. Corn silage was then planted for the summer crop of 2000. Manure solids are screened from the wastewater with a static screen. The screened manure is applied to farmland adjacent to the dairy at agronomic rates.

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Order # 09-10-075  
10/30/09 10:18

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Page 2 of 5

## TEST RESULTS BY SAMPLE

**Sample: 01A MANURE**

**Collected: 10/20/09 15:30**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL SOLIDS	57.9	0.1	wt %	10/22/09	AMM
* CHLORIDE ON SOLIDS	6980	141	mg/kg	10/22/09	RAD
NITRATE as (N)	ND	0.20	mg/kg	10/22/09	RAD
TOTAL KJELDAHL NITROGEN	12700	149	mg/kg	10/29/09	RAD

**Sample: 02A WASTEWATER**

**Collected: 10/20/09 13:05**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	4060	13	mg/l	10/29/09	RAD
* CHLORIDE	470	50	mg/l	10/22/09	RAD
NITRATE as (N)	0.68	0.20	mg/l	10/22/09	RAD
TOTAL KJELDAHL NITROGEN	193	2	mg/l	10/29/09	RAD

**Sample: 03A PARLOR WELL**

**Collected: 10/20/09 12:41**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	270	13	mg/l	10/29/09	RAD
* CHLORIDE	14.7	2.0	mg/l	10/22/09	RAD
NITRATE as (N)	2.15	0.20	mg/l	10/22/09	RAD
TOTAL KJELDAHL NITROGEN	ND	0.5	mg/l	10/29/09	RAD

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TEST RESULTS BY SAMPLE**Sample: 04A HOUSE WELL****Collected: 10/20/09 12:59**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	319	13	mg/l	10/29/09	RAD
* CHLORIDE	13.8	2.0	mg/l	10/22/09	RAD
NITRATE as (N)	2.33	0.20	mg/l	10/22/09	RAD
TOTAL KJELDAHL NITROGEN	0.7	0.5	mg/l	10/29/09	RAD

**Sample: 05A IRRIGATION WELL****Collected: 10/20/09 14:15**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	256	13	mg/l	10/29/09	RAD
* CHLORIDE	14.8	2.0	mg/l	10/22/09	RAD
NITRATE as (N)	1.54	0.20	mg/l	10/22/09	RAD
TOTAL KJELDAHL NITROGEN	ND	0.5	mg/l	10/29/09	RAD

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04/23/09 15:16

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## TEST RESULTS BY SAMPLE

**Sample: 01A WASTEWATER**

**Collected: 04/15/09 09:17**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	4130	13	mg/l	04/21/09	CRY
CHLORIDE	428	100	mg/l	04/16/09	CRY
NITRATE as (N)	0.81	0.40	mg/l	04/16/09	CRY
TOTAL KJELDAHL NITROGEN	311	5	mg/l	04/22/09	WJW

**Sample: 02A IRRIGATION WELL**

**Collected: 04/15/09 09:27**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	254	13	mg/l	04/21/09	CRY
CHLORIDE	14.0	2.0	mg/l	04/16/09	CRY
NITRATE as (N)	1.52	0.20	mg/l	04/16/09	CRY
TOTAL KJELDAHL NITROGEN	ND	0.5	mg/l	04/22/09	WJW

**Sample: 03A HOUSE WELL**

**Collected: 04/15/09 09:45**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	518	13	mg/l	04/21/09	CRY
CHLORIDE	16.4	2.0	mg/l	04/16/09	CRY
NITRATE as (N)	3.19	0.20	mg/l	04/16/09	CRY
TOTAL KJELDAHL NITROGEN	ND	0.5	mg/l	04/22/09	WJW

**Sample: 04A PARLOR WELL**

**Collected: 04/15/09 10:00**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	282	13	mg/l	04/21/09	CRY
CHLORIDE	16.3	2.0	mg/l	04/16/09	CRY
NITRATE as (N)	2.56	0.20	mg/l	04/16/09	CRY
TOTAL KJELDAHL NITROGEN	ND	0.5	mg/l	04/22/09	WJW

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T104704346-08-TX

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Analytical Services Kwik!

Order # 08-11-047  
11/20/08 09:43

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Page 2 of 5

TEST RESULTS BY SAMPLE**Sample: 01A WASTEWATER****Collected: 11/12/08 09:40**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	4250	10	mg/l	11/19/08	CRY
CHLORIDE	420	80	mg/l	11/13/08	CRY
NITRATE as (N)	0.92	0.20	mg/l	11/13/08	CRY
TOTAL KJELDAHL NITROGEN	265	2	mg/l	11/14/08	VRB

**Sample: 02A HOUSE WELL****Collected: 11/12/08 09:05**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	267	10	mg/l	11/19/08	CRY
CHLORIDE	12.8	2.0	mg/l	11/13/08	CRY
NITRATE as (N)	1.71	0.20	mg/l	11/13/08	CRY
TOTAL KJELDAHL NITROGEN	ND	0.5	mg/l	11/14/08	VRB

**Sample: 03A IRRIGATION WELL****Collected: 11/12/08 09:25**

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	258	10	mg/l	11/19/08	CRY
CHLORIDE	12.3	2.0	mg/l	11/13/08	CRY
NITRATE as (N)	1.39	0.20	mg/l	11/13/08	CRY
TOTAL KJELDAHL NITROGEN	ND	0.5	mg/l	11/14/08	VRB

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11/20/08 09:43

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## TEST RESULTS BY SAMPLE

Sample: 04A PARLOR WELL

Collected: 11/12/08 09:55

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	265	10	mg/l	11/19/08	CRY
CHLORIDE	12.7	2.0	mg/l	11/13/08	CRY
NITRATE as (N)	1.72	0.20	mg/l	11/13/08	CRY
TOTAL KJELDAHL NITROGEN	ND	0.5	mg/l	11/14/08	VRB

Sample: 05A MANURE

Collected: 11/12/08 12:00

<u>Test Description</u>	<u>Result</u>	<u>MQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PERCENT SOLIDS DRY WEIGHT	73.4		wt % solids	11/14/08	CRY
CHLORIDE ON SOLIDS	2810	548	mg/kg	11/13/08	CRY
NITRATE as (N)	ND	1.37	mg/kg	11/13/08	CRY
TOTAL KJELDAHL NITROGEN	9220	136	mg/kg	11/14/08	VRB

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05/13/08 11:54

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## TEST RESULTS BY SAMPLE

**Sample: 01A IRRIGATION WELL**

**Collected: 05/06/08 11:55**

<u>Test Description</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	262	10	mg/l	05/12/08	MJP
CHLORIDE	13.9	2.0	mg/l	05/07/08	VRB
NITRATE as (N)	1.84	0.20	mg/l	05/07/08	VRB
TOTAL KJELDAHL NITROGEN	<0.5	0.5	mg/l	05/08/08	MJP

**Sample: 02A PARLOR WELL**

**Collected: 05/06/08 12:23**

<u>Test Description</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	234	10	mg/l	05/12/08	MJP
CHLORIDE	12.7	2.0	mg/l	05/07/08	VRB
NITRATE as (N)	2.07	0.20	mg/l	05/07/08	VRB
TOTAL KJELDAHL NITROGEN	<0.5	0.5	mg/l	05/08/08	MJP

**Sample: 03A HOUSE WELL**

**Collected: 05/06/08 12:15**

<u>Test Description</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TOTAL DISSOLVED SOLIDS	250	10	mg/l	05/12/08	MJP
CHLORIDE	12.7	2.0	mg/l	05/07/08	VRB
NITRATE as (N)	2.06	0.20	mg/l	05/07/08	VRB
TOTAL KJELDAHL NITROGEN	<1.0	1.0	mg/l	05/08/08	MJP

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PP-1022

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Order # 08-05-030  
05/13/08 11:54

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Page 3 of 4

## TEST RESULTS BY SAMPLE

Sample: 04A WASTEWATER

Collected: 05/06/08 12:01

Test Description	Result	RL	Units	Analyzed	By
TOTAL DISSOLVED SOLIDS	3260	10	mg/l	05/12/08	MJP
CHLORIDE	278	120	mg/l	05/07/08	VRB
NITRATE as (N)	15.3	2.0	mg/l	05/07/08	VRB
TOTAL KJELDAHL NITROGEN	262	5	mg/l	05/08/08	MJP

Sample: 05A POND SLURRY

Collected: 05/06/08 13:18

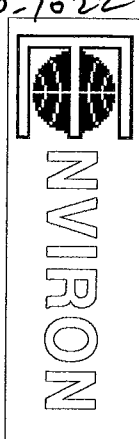
Test Description	Result	RL	Units	Analyzed	By
TOTAL DISSOLVED SOLIDS	233000	10	mg/l	05/12/08	MJP
CHLORIDE	39.7	2.0	mg/l	05/07/08	VRB
NITRATE as (N)	0.72	0.20	mg/l	05/07/08	VRB
TOTAL KJELDAHL NITROGEN	678	5	mg/l	05/08/08	MJP

Sample: 06A MANURE

Collected: 05/06/08 13:05

Test Description	Result	RL	Units	Analyzed	By
PERCENT SOLIDS DRY WEIGHT	72.40		wt % solids	05/08/08	DLS
CHLORIDE ON SOLIDS	2010	198	mg/kg	05/07/08	VRB
NITRATE as (N)	10.6	2.0	mg/kg	05/07/08	VRB
TOTAL KJELDAHL NITROGEN	20200	100	mg/kg	05/08/08	MJP

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DP-1022

Environ Labs  
812 W. 9TH  
Amarillo, Texas 79101  
806-376-7004

Client: Enviro-Ag Engineering  
702 Quail Creek  
Amarillo, TX 79124

Project Name: Southern Draw Dairy  
Location: Clovis, NM

Date Sampled: 6/27/00  
Date Received: 6/29/00  
Sample Type: Water  
Sample Condition: Intact-Chilled  
Sample Rec'd By: RB  
C-O-C#

Lab ID#	Field Code Description	Nitrate-N Analysis Date	Nitrate-N mg/L	TKN Analysis Date	TKN mg/L	TDS Analysis Date	TDS mg/L
14801	Lagoon	7/10/00	0.29	7/9/00	38	6/30/00	1723
14802	Parlor Well	7/10/00	0.14	7/9/00	<1.0	6/30/00	231
14803	House Well	7/10/00	0.24	7/9/00	<1.0	6/30/00	273
14804	South Well	7/10/00	0.18	7/9/00	<1.0	6/30/00	271

QC: Blank(mg/L) Spike(%Rec) Duplicate(RPD)  
Nitrate <0.1 120 0  
Chloride <1 101 10  
TKN <1.0 120 0  
TDS <10 NA 4

METHODS: Nitrate EPA 600 4-79-020 353.3, TKN 351.4, TDS 160.1

Rick Baker

Lab Director

7/16/00

Date

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GROUND WATER BUREAU

DP-1022

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Order # 06-04-070  
05/08/06 14:05

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Page 2

TEST RESULTS BY SAMPLE

Sample: 01A SOUTH WELL

Collected: 04/25/06 12:30

<u>Test Description</u>	<u>Result</u>	<u>SQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
CHLORIDE	15.6	2.0	mg/l	04/26/06	TWC
NITRATE as (N)	1.47	0.20	mg/l	04/26/06	TWC
TOTAL DISSOLVED SOLIDS	274	10	mg/l	04/26/06	TWC
TOTAL KJELDAHL NITROGEN	<0.5	0.5	mg/l	05/05/06	BNH

Sample: 02A HOUSE WELL

Collected: 04/25/06 12:45

<u>Test Description</u>	<u>Result</u>	<u>SQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
CHLORIDE	17.0	2.0	mg/l	04/26/06	TWC
NITRATE as (N)	1.87	0.20	mg/l	04/26/06	TWC
TOTAL DISSOLVED SOLIDS	274	10	mg/l	04/26/06	TWC
TOTAL KJELDAHL NITROGEN	<0.5	0.5	mg/l	05/05/06	BNH

Sample: 03A PARLOR WELL

Collected: 04/25/06 12:50

<u>Test Description</u>	<u>Result</u>	<u>SQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
CHLORIDE	18.3	2.0	mg/l	04/26/06	TWC
NITRATE as (N)	1.75	0.20	mg/l	04/26/06	TWC
TOTAL DISSOLVED SOLIDS	261	10	mg/l	04/26/06	TWC
TOTAL KJELDAHL NITROGEN	<0.5	0.5	mg/l	05/05/06	BNH

Sample: 04A WASTEWATER RCS #2

Collected: 04/25/06 12:35

<u>Test Description</u>	<u>Result</u>	<u>SQL</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
CHLORIDE	347	2.0	mg/l	04/26/06	TWC
NITRATE as (N)	2.34	0.20	mg/l	04/26/06	TWC
TOTAL DISSOLVED SOLIDS	3620	10	mg/l	04/26/06	TWC
TOTAL KJELDAHL NITROGEN	478	0.5	mg/l	05/05/06	BNH

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